

## ABSTRACT

An apparatus for the on-chip, soft repair of random access memory arrays. In representative embodiments, circuitry is disclosed which provides the ability to soft  
5 repair defective random access memory arrays. The disclosed techniques for repair of random access memory arrays do not use techniques such as laser repair in the removal of defective parts of the integrated circuit and its replacement with a redundant part. No additional processing steps are involved. The circuitry necessary to repair defects in random access memory arrays is included on-chip in the input/output blocks of the RAM.